

Figure A-62. EC-18B, ACN/PCN Curves

27 Sep 91

Aircraft Manufacturer LockheedAircraft Engine Manufacturer Allison (T56-A-15)No. of Engines 4 Engine Rating 4910 ESHPMin. T/O Wt. 80.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 750 ft\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,900 ftTax. T/O Wt. Peace-Time 155.0 k-lb Max. T/O Wt. War-Time 175.0 k-lb\* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,100 ft\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 5,500 ftMin. Ldg. Wt. 100.0 k-lb Max. Ldg. Wt. 175.0 k-lb\* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,350 ft\* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,400 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

## ACN

| Weight | Rigid Pavement Subgrades |             |          |            | Flexible Pavement Subgrades |             |          |          |
|--------|--------------------------|-------------|----------|------------|-----------------------------|-------------|----------|----------|
|        |                          |             |          |            | Very                        |             |          |          |
|        | High<br>A                | Medium<br>B | Low<br>C | Ultra<br>D | High<br>A                   | Medium<br>B | Low<br>C | Low<br>D |
| 100    | 15                       | 17          | 19       | 21         | 12                          | 15          | 18       | 21       |
| 155    | 29                       | 32          | 35       | 37         | 25                          | 29          | 32       | 37       |
| 175    | 34                       | 37          | 41       | 43         | 30                          | 34          | 37       | 43       |

Figure A-63. EC-130E/H, Hercules

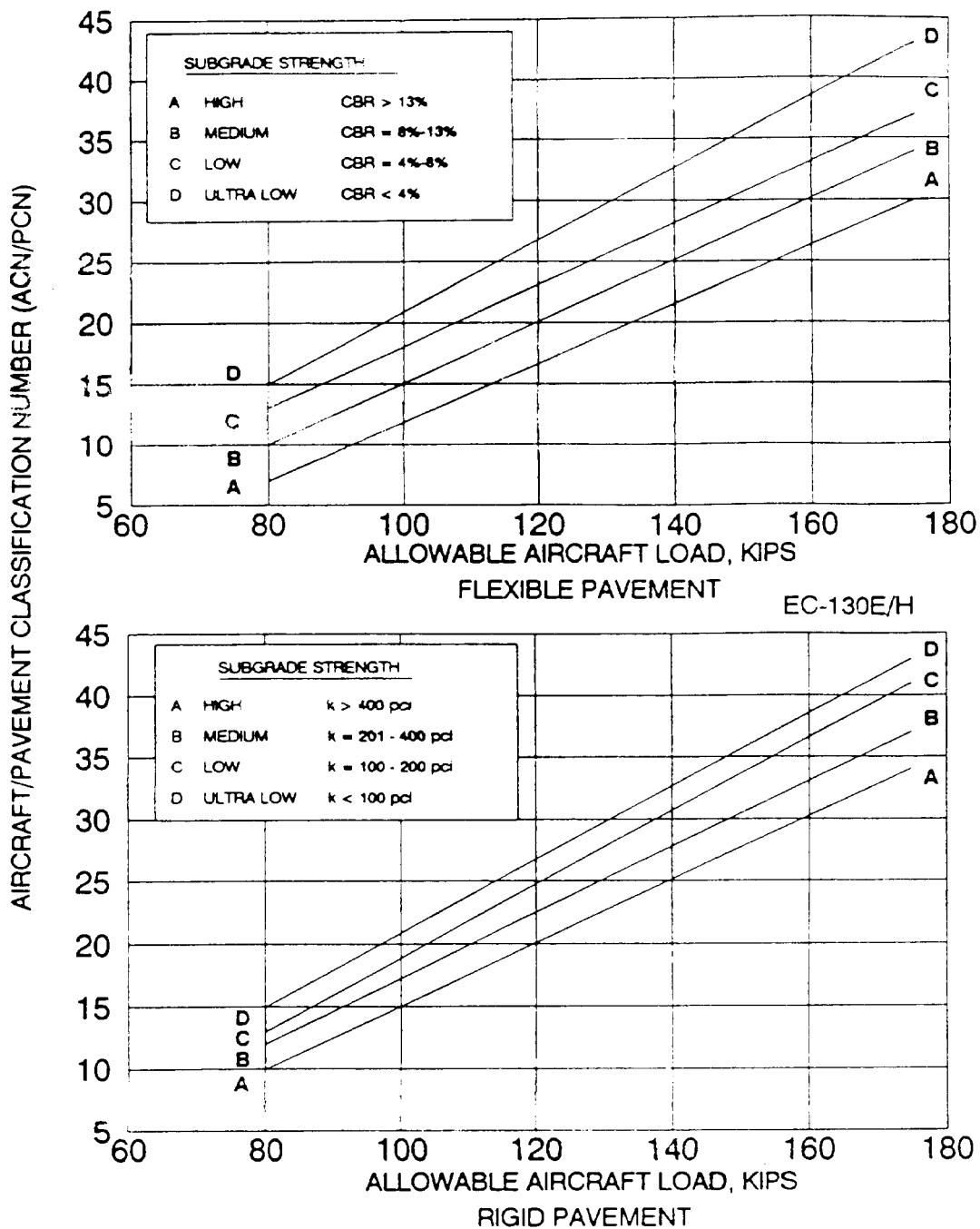


Figure A-64. EC-130E/H, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Lockheed

Aircraft Engine Manufacturer Allison (T56-A-15)

No. of Engines 4 Engine Rating 4910 ESHP

Min. T/O Wt. 70.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 750 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,900 ft

Max. T/O Wt. Peace-Time 155.0 k-lb Max. T/O Wt. War-Time 175.0 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,100 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 5,500 ft

Min. Ldg. Wt. 90.0 k-lb Max. Ldg. Wt. 175.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,350 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,400 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |    |        |     | Flexible Pavement Subgrades |      |    |            |
|--------|--------------------------|----|--------|-----|-----------------------------|------|----|------------|
|        | High                     |    | Medium | Low | Ultra Low                   | High |    | Low        |
|        | A                        | B  | C      | D   | A                           | B    | C  | Very Low D |
| 90     | 13                       | 14 | 16     | 17  | 10                          | 12   | 16 | 19         |
| 155    | 29                       | 32 | 35     | 37  | 26                          | 29   | 32 | 37         |
| 175    | 34                       | 38 | 41     | 43  | 31                          | 34   | 37 | 43         |

Figure A-65. MC-130E/H, Hercules

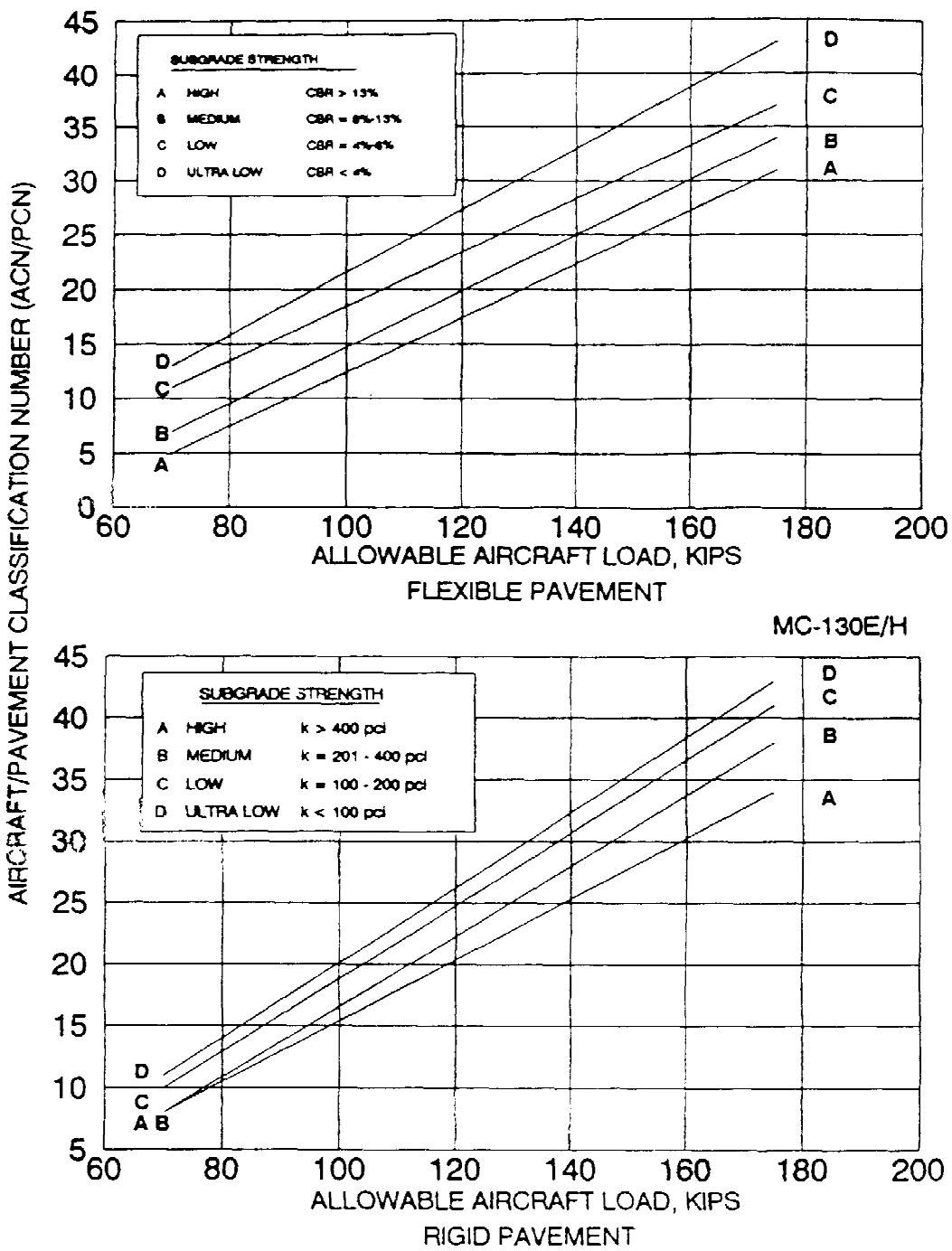


Figure A-66. MC-130E/H, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Lockheed

Aircraft Engine Manufacturer Allison (T56-A-15)

No. of Engines 4 Engine Rating 4910 ESHP

Min. T/O Wt. 70.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 750 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,900 ft

Max. T/O Wt. Peace-Time 155.0 k-lb Max. T/O Wt. War-Time 175.0 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 4,100 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 5,500 ft

Min. Ldg. Wt. 90.0 k-lb Max. Ldg. Wt. 175.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,350 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 2,400 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

#### ACN

| Weight | Rigid Pavement Subgrades |             |          |          | Flexible Pavement Subgrades |             |          |          |
|--------|--------------------------|-------------|----------|----------|-----------------------------|-------------|----------|----------|
|        | Ultra                    |             | Very     |          | High                        |             | Medium   |          |
|        | High<br>A                | Medium<br>B | Low<br>C | Low<br>D | High<br>A                   | Medium<br>B | Low<br>C | Low<br>D |
| 90     | 13                       | 14          | 16       | 17       | 10                          | 12          | 16       | 19       |
| 155    | 29                       | 32          | 35       | 37       | 26                          | 29          | 32       | 37       |
| 175    | 34                       | 38          | 41       | 43       | 31                          | 34          | 37       | 43       |

Figure A-67. WC-130E/H, Hercules

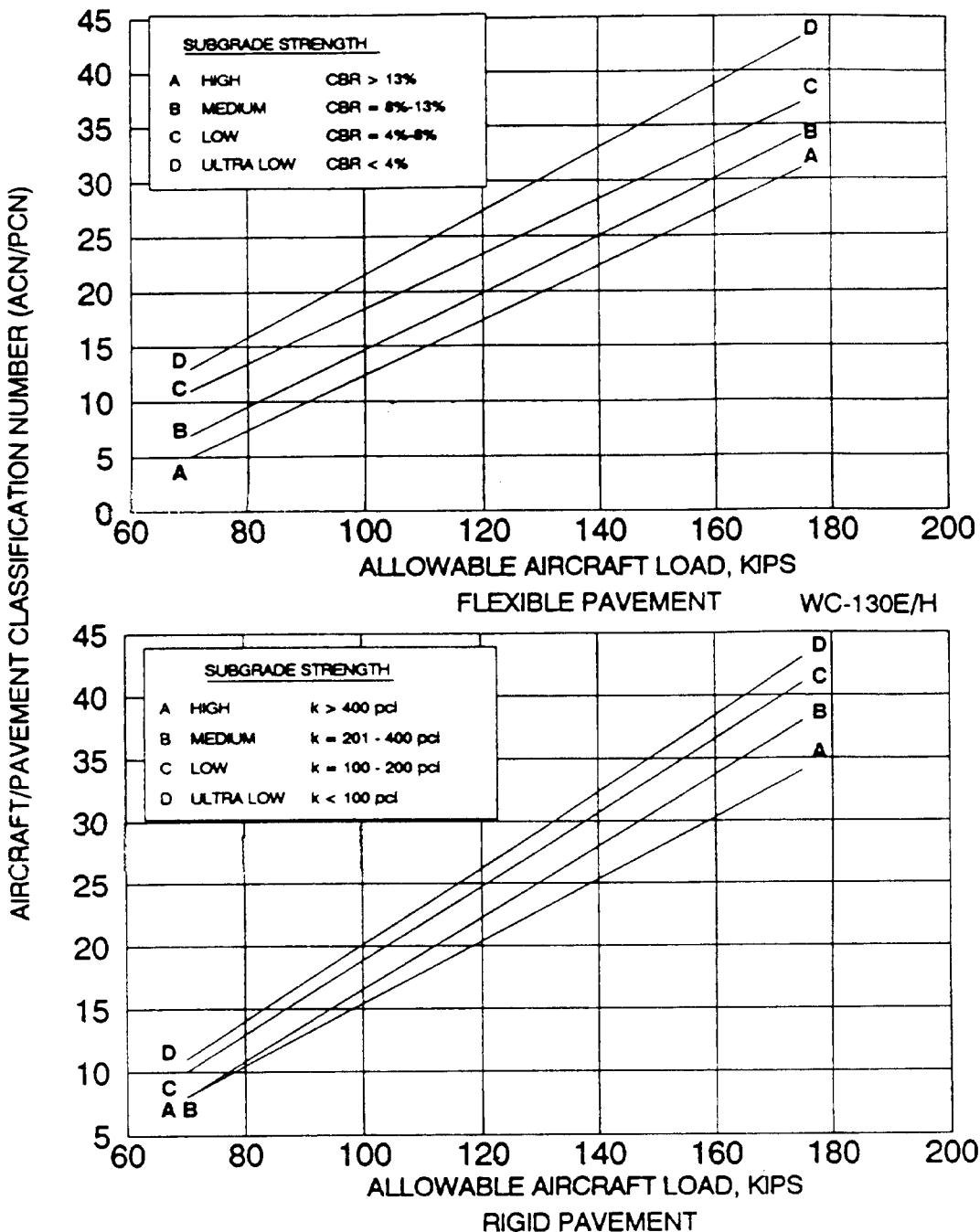


Figure A-68. WC-130E/N, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (J57-P-59W)

No. of Engines 4 Engine Rating 13,750 lb

Min. T/O Wt. 140.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 1,700 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,000 ft

Max. T/O Wt. Peace-Time 300.8 k-lb Max. T/O Wt. War-Time 301.6 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 10,200 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 12,800 ft

Min. Ldg. Wt. 107.1 k-lb Max. Ldg. Wt. 297.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,970 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,250 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |             |          |                   | Flexible Pavement Subgrades |             |          |                  |
|--------|--------------------------|-------------|----------|-------------------|-----------------------------|-------------|----------|------------------|
|        | High<br>A                | Medium<br>B | Low<br>C | Ultra<br>Low<br>D | High<br>A                   | Medium<br>B | Low<br>C | Very<br>Low<br>D |
| 107    | 5                        | 6           | 7        | 9                 | 5                           | 7           | 9        | 12               |
| 297    | 33                       | 40          | 49       | 55                | 33                          | 40          | 48       | 55               |
| 301    | 34                       | 41          | 50       | 56                | 34                          | 41          | 49       | 56               |
| 302    | 34                       | 41          | 50       | 56                | 34                          | 41          | 49       | 56               |

Figure A-69. EC-135A/G/L

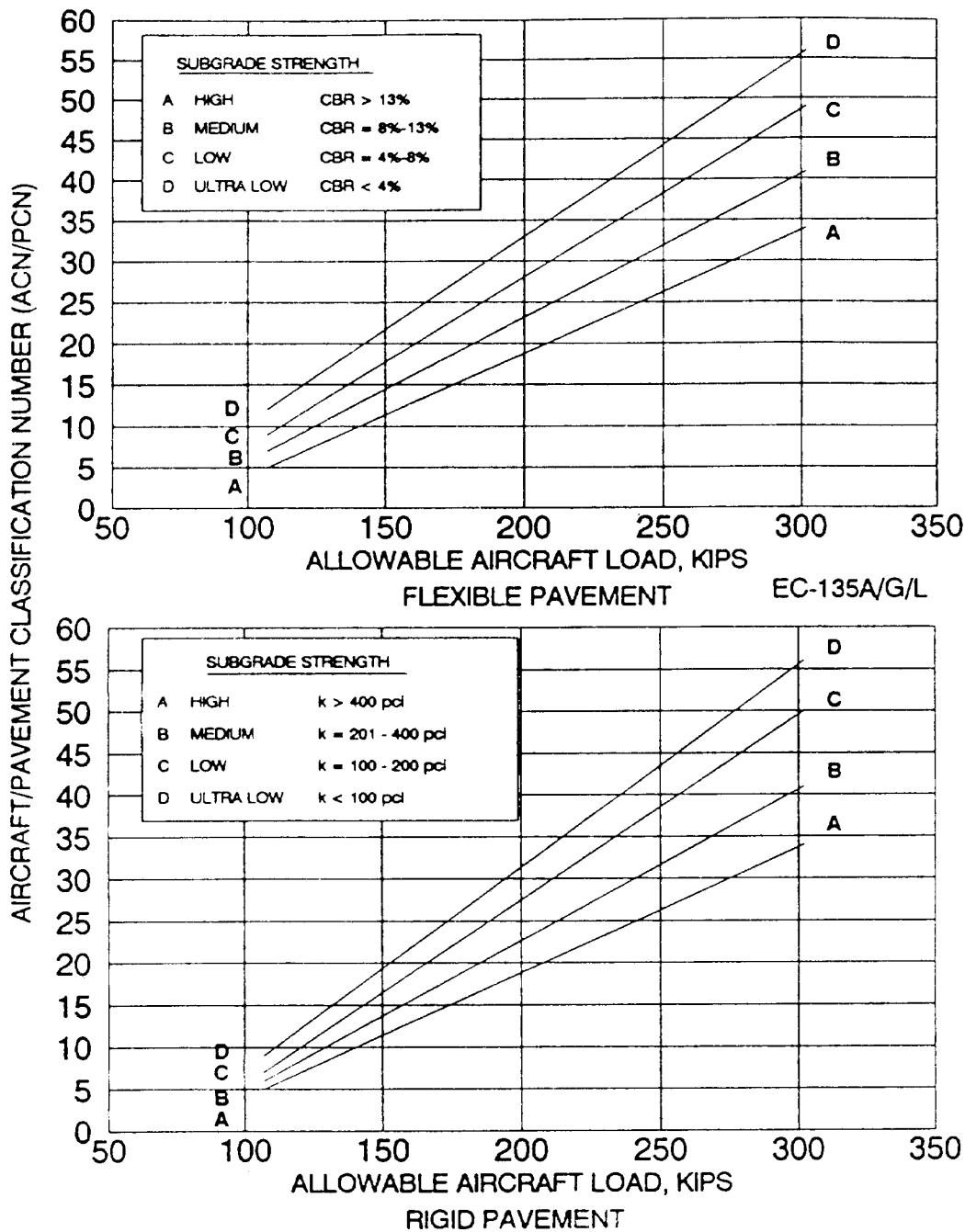


Figure A-70. EC-135A/G/L, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (TF33-P-9)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 160.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 2,100 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,500 ft

Max. T/O Wt. Peace-Time 301.6 k-lb Max. T/O Wt. War-Time 301.6 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,530 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 10,800 ft

Min. Ldg. Wt. 146.4 k-lb Max. Ldg. Wt. 297.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,760 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,300 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |    |        |     | Flexible Pavement Subgrades |    |        |     |
|--------|--------------------------|----|--------|-----|-----------------------------|----|--------|-----|
|        | High                     |    | Medium | Low | High                        |    | Medium | Low |
|        | A                        | B  | C      | D   | A                           | B  | C      | D   |
| 146    | 11                       | 13 | 15     | 18  | 11                          | 14 | 17     | 21  |
| 297    | 33                       | 40 | 49     | 55  | 33                          | 40 | 48     | 55  |
| 302    | 34                       | 41 | 50     | 56  | 34                          | 41 | 49     | 56  |

Figure A-71. EC-135C/J

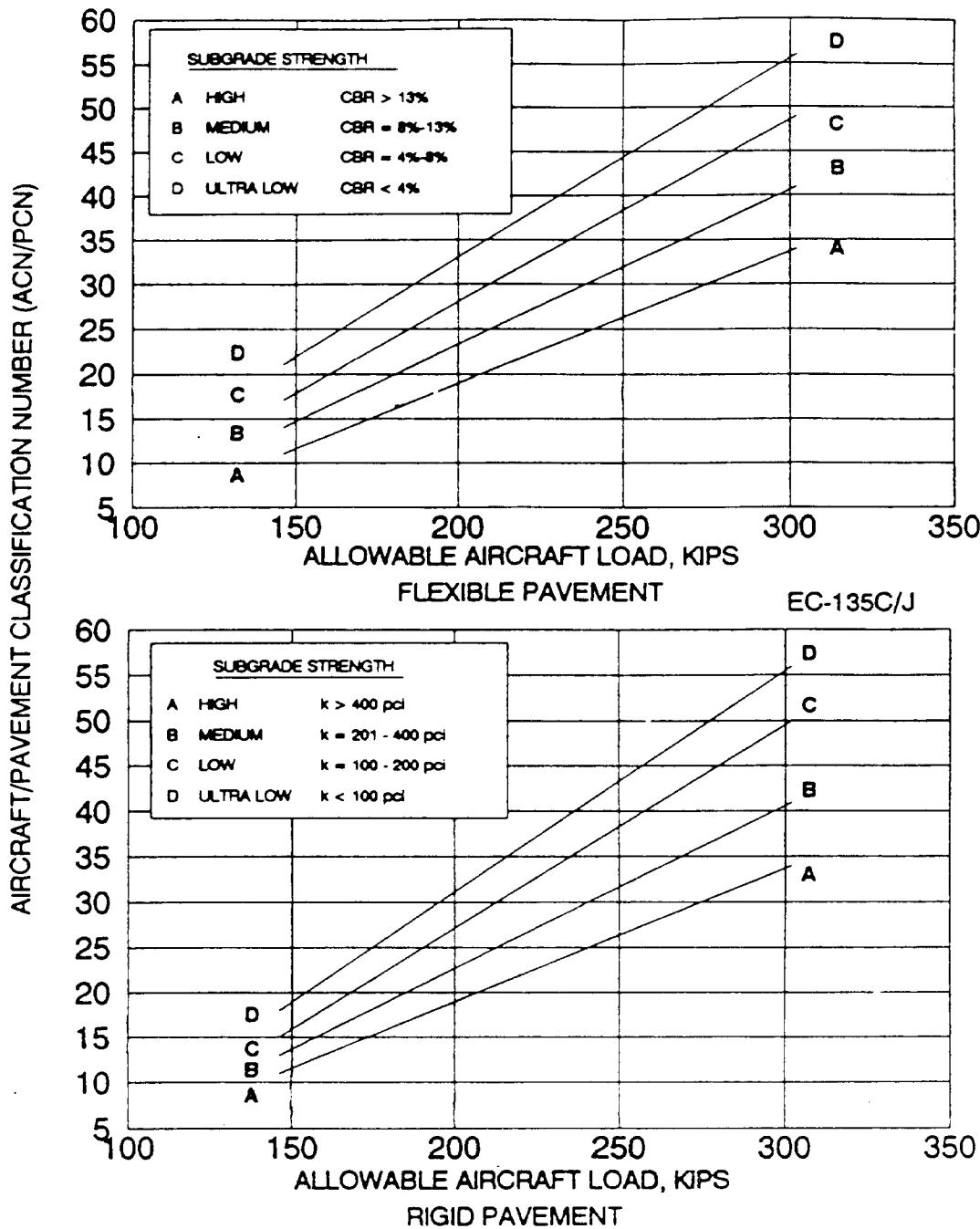


Figure A-72. EC-135C/J, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (TF33-PW-102)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 160.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 2,100 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,500 ft

Max. T/O Wt. Peace-Time 301.6 k-lb Max. T/O Wt. War-Time 301.6 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,530 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 10,800 ft

Min. Ldg. Wt. 146.4 k-lb Max. Ldg. Wt. 297.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,760 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,300 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |             |          |          | Flexible Pavement Subgrades |             |          |                  |
|--------|--------------------------|-------------|----------|----------|-----------------------------|-------------|----------|------------------|
|        | High<br>A                | Medium<br>B | Low<br>C | Low<br>D | High<br>A                   | Medium<br>B | Low<br>C | Very<br>Low<br>D |
| 146    | 11                       | 13          | 16       | 18       | 11                          | 13          | 17       | 21               |
| 297    | 33                       | 40          | 49       | 55       | 33                          | 40          | 48       | 55               |
| 302    | 34                       | 41          | 50       | 56       | 34                          | 41          | 49       | 56               |

Figure A-73. EC-135E/H/K/P/Y

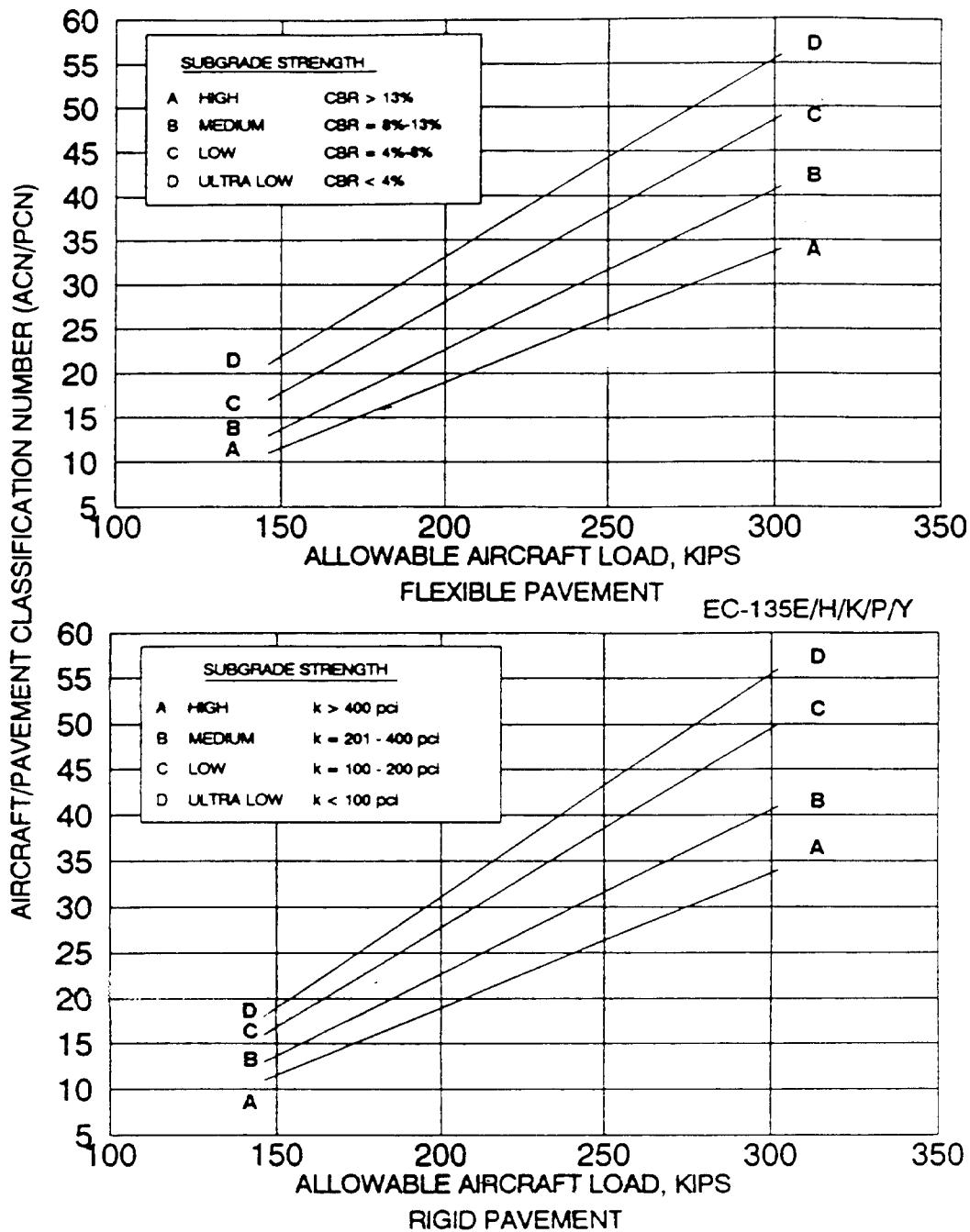


Figure A-74. EC-135E/H/K/P/Y, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (TF33-P-5)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 180.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 2,700 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 3,400 ft

Max. T/O Wt. Peace-Time 301.6 k-lb Max. T/O Wt. War-Time 301.6 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,600 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 11,250 ft

Min. Ldg. Wt. 167.1 k-lb Max. Ldg. Wt. 297.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,820 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,300 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |             |          |                   | Flexible Pavement Subgrades |             |          |                  |
|--------|--------------------------|-------------|----------|-------------------|-----------------------------|-------------|----------|------------------|
|        | High<br>A                | Medium<br>B | Low<br>C | Ultra<br>Low<br>D | High<br>A                   | Medium<br>B | Low<br>C | Very<br>Low<br>D |
| 167    | 15                       | 17          | 20       | 23                | 14                          | 17          | 21       | 26               |
| 297    | 33                       | 40          | 49       | 55                | 33                          | 40          | 48       | 55               |
| 302    | 34                       | 41          | 50       | 56                | 34                          | 41          | 49       | 56               |

Figure A-75. RC-135S/W

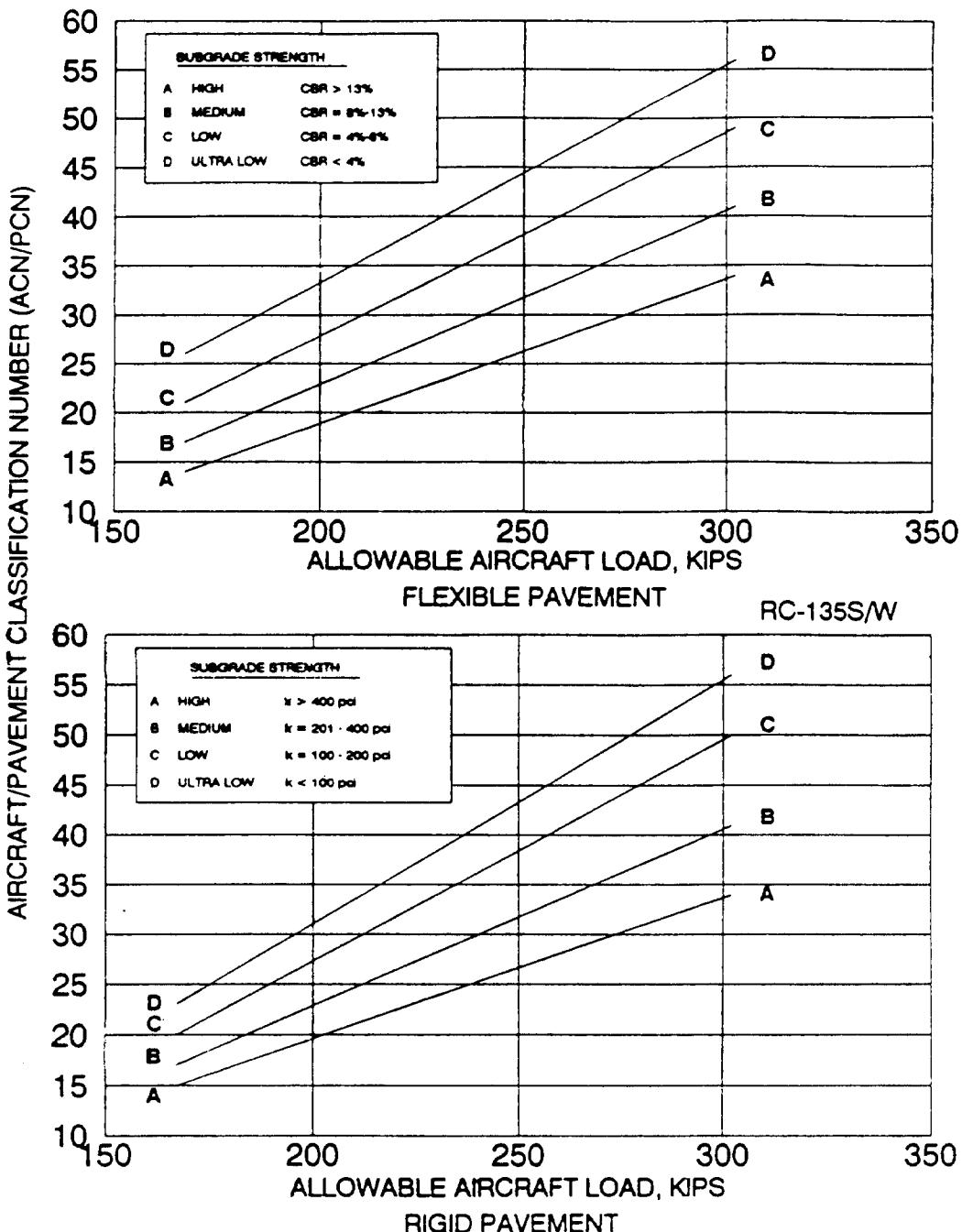


Figure A-76. RG-135S/W, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (TF33-P-9)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 160.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 2,100 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 2,500 ft

Max. T/O Wt. Peace-Time 301.6 k-lb Max. T/O Wt. War-Time 301.6 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,530 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 10,800 ft

Min. Ldg. Wt. 146.4 k-lb Max. Ldg. Wt. 297.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,760 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,400 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |             |          |          | Flexible Pavement Subgrades |             |          |          |
|--------|--------------------------|-------------|----------|----------|-----------------------------|-------------|----------|----------|
|        |                          |             |          |          | Very                        |             |          |          |
|        | High<br>A                | Medium<br>B | Low<br>C | Low<br>D | High<br>A                   | Medium<br>B | Low<br>C | Low<br>D |
| 146    | 11                       | 13          | 15       | 18       | 11                          | 13          | 17       | 21       |
| 297    | 33                       | 40          | 49       | 55       | 33                          | 40          | 48       | 55       |
| 302    | 34                       | 41          | 50       | 56       | 34                          | 41          | 49       | 56       |

Figure A-77. RC-135U/V

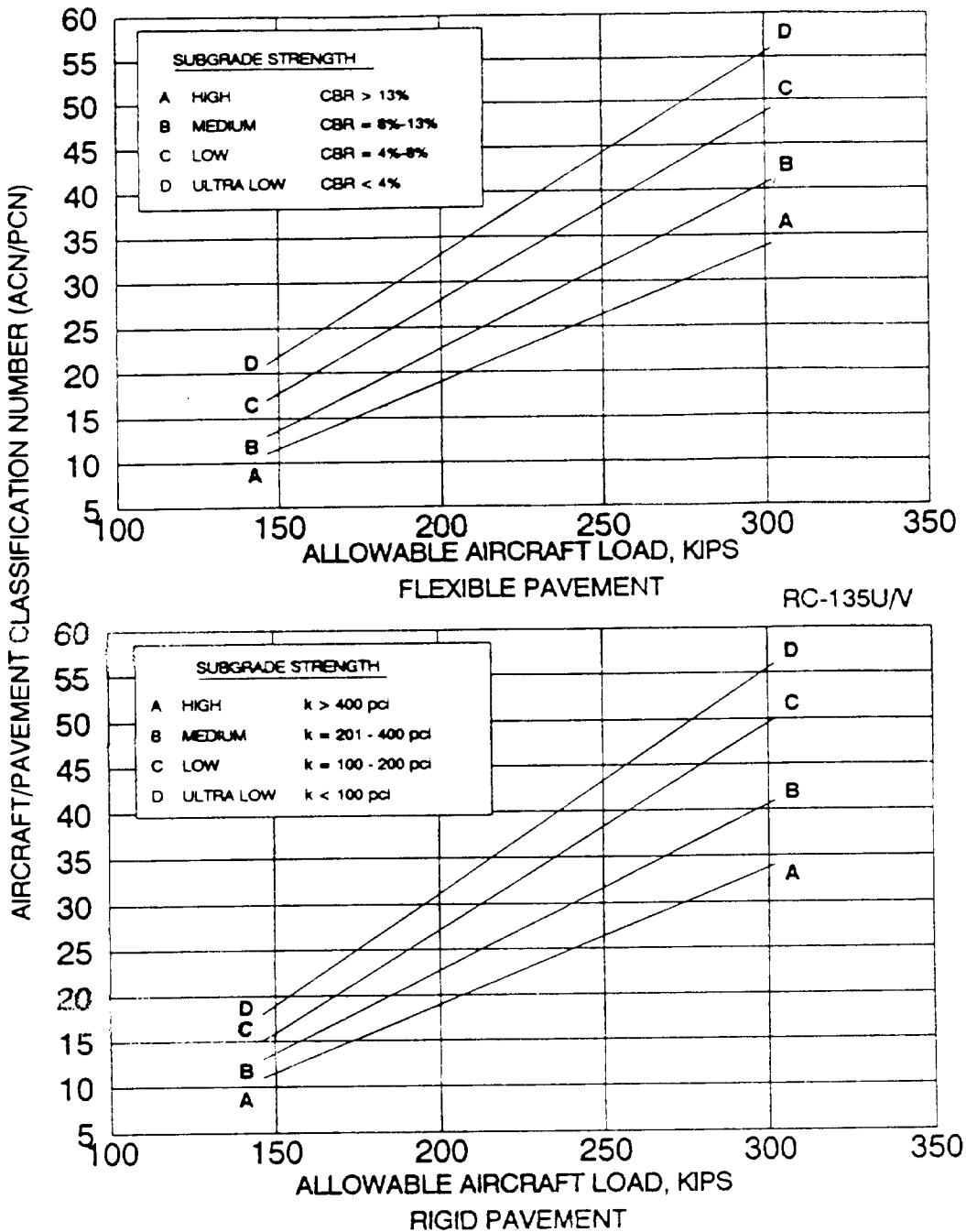


Figure A-78. RG-135U/V, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer Boeing

Aircraft Engine Manufacturer Pratt and Whitney (TF33-P-5)

No. of Engines 4 Engine Rating 18,000 lb

Min. T/O Wt. 140.0 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 1,500 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 1,900 ft

Max. T/O Wt. Peace-Time 301.6 k-lb Max. T/O Wt. War-Time 301.6 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 8,600 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 11,250 ft

Min. Ldg. Wt. 124.0 k-lb Max. Ldg. Wt. 297.0 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 2,250 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 7,300 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |    |        |     | Flexible Pavement Subgrades |      |    |            |
|--------|--------------------------|----|--------|-----|-----------------------------|------|----|------------|
|        | High                     |    | Medium | Low | Ultra                       | High |    | Low        |
|        | A                        | B  | C      | D   |                             | A    | B  | Very Low D |
| 124    | 8                        | 9  | 11     | 13  |                             | 8    | 9  | 12         |
| 297    | 33                       | 40 | 49     | 55  |                             | 33   | 40 | 48         |
| 302    | 34                       | 41 | 50     | 56  |                             | 34   | 41 | 49         |

Figure A-79. WC-135B

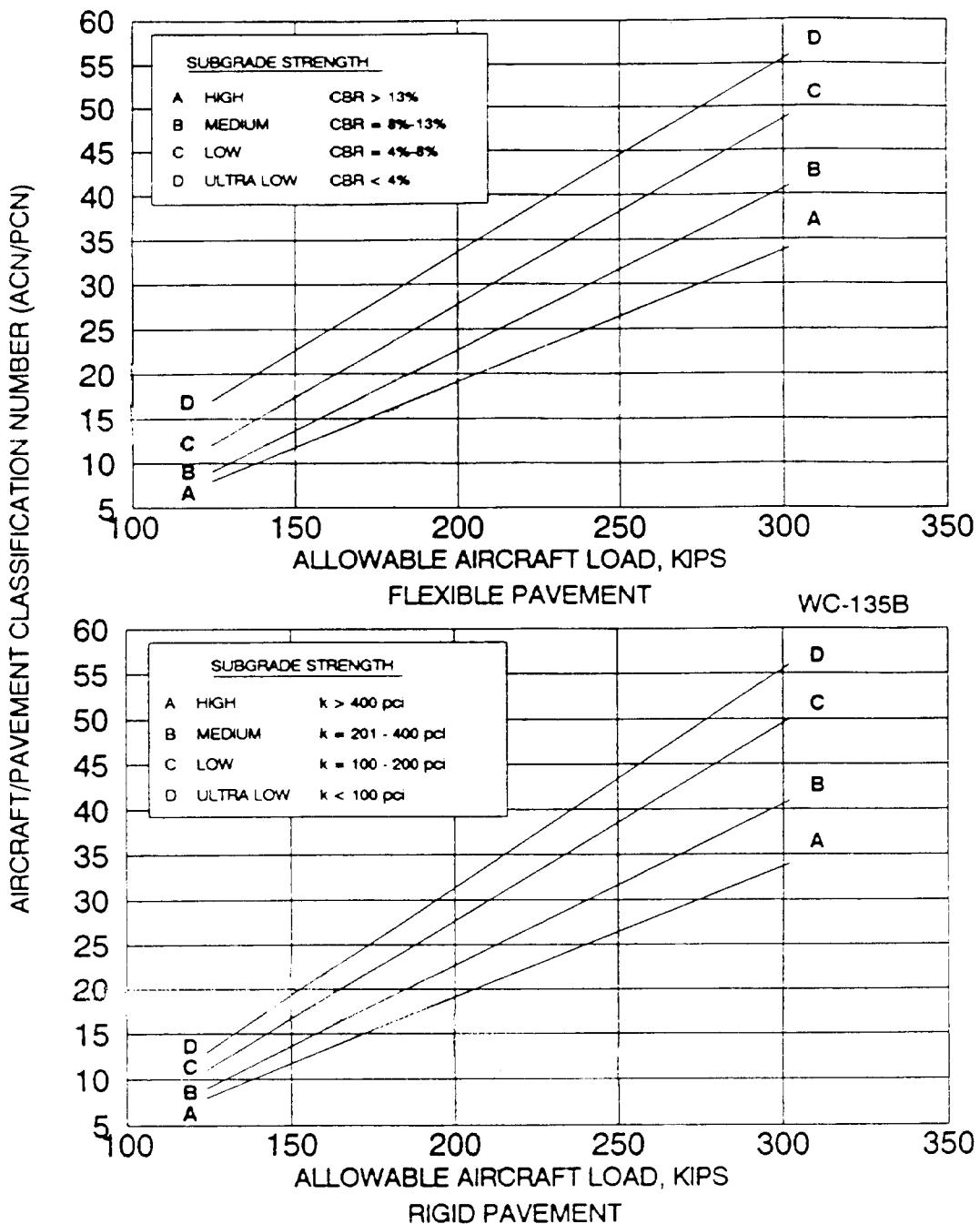


Figure A-80. WC-135B, ACN/PCN Curves

ETL 1110-3-394

27 Sep 91

Aircraft Manufacturer General Dynamics/Grumman

Aircraft Engine Manufacturer Pratt and Whitney (TF30-P-3)

No. of Engines 2 Engine Rating 18,500 lb

Min. T/O Wt. 61.7 k-lb \* Min. T/O Dist. @ Min. T/O Wt. 1,700 ft

\* Min. T/O Dist. @ Min. T/O Wt. With Abort Dist. 4,000 ft

Max. T/O Wt. Peace-Time 89.2 k-lb Max. T/O Wt. War-Time 100.0 k-lb

\* Min. T/O Dist. @ Max. T/O Wt. War-Time 5,600 ft

\* Min. T/O Dist. @ Max. T/O Wt. War-Time With Abort Dist. 13,000 ft

Min. Ldg. Wt. 60.1 k-lb Max. Ldg. Wt. 82.5 k-lb

\* Min. Ldg. Dist. @ Min. Ldg. Wt. 1,770 ft

\* Min. Ldg. Dist. @ Max. Ldg. Wt. 6,000 ft

\* These distances are at 59°F, at sea level, with zero runway gradient, and on a clean dry runway surface.

ACN

| Weight | Rigid Pavement Subgrades |             |          |                   | Flexible Pavement Subgrades |             |          |                  |
|--------|--------------------------|-------------|----------|-------------------|-----------------------------|-------------|----------|------------------|
|        | High<br>A                | Medium<br>B | Low<br>C | Ultra<br>Low<br>D | High<br>A                   | Medium<br>B | Low<br>C | Very<br>Low<br>D |
| 60     | 22                       | 22          | 23       | 23                | 24                          | 26          | 27       | 27               |
| 83     | 35                       | 35          | 35       | 36                | 37                          | 38          | 38       | 38               |
| 89     | 38                       | 39          | 38       | 40                | 41                          | 41          | 41       | 41               |
| 100    | 44                       | 45          | 44       | 46                | 47                          | 47          | 47       | 46               |

Figure A-81. EF-111A, Raven